

PATENT

Atty. Dkt. No. APPM005191.C1/ISM/CORE/MCVD/PJS
Serial No.: 10/792,323

IN THE CLAIMS:

Please cancel claims 2, 5-7, 14-15, and 18-20, and amend the claims as follows:

1. (Currently Amended) An apparatus for vaporizing a solid precursor, comprising:

a housing defining an interior volume having an inlet for receiving a carrier gas and an outlet operably connected to an atomic layer deposition chamber;

at least two surfaces contained in the housing, wherein the at least two surfaces contain stainless steel, have a tantalum-containing the solid precursor applied thereto, and are spaced to allow passage of the carrier gas therebetween; and

at least one heating member contained in the housing, wherein the inlet is substantially perpendicular to the at least two surfaces.

2. (Cancelled)

3. (Currently Amended) The apparatus of claim [[2]] 1, wherein the at least two surfaces are selected from the group consisting of a baffle, a rod, a mesh and a grating.

4. (Original) The apparatus of claim 1, wherein the at least two surfaces have a form selected from the group consisting of an s-shape, a linear shape and a cone shape.

5-7. (Cancelled)

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8. (Currently Amended) An apparatus for vaporizing a solid precursor, comprising:

a housing defining an interior volume having an inlet for receiving a carrier gas, and an outlet for delivering the carrier gas to an atomic layer deposition chamber, and a vaporized solid precursor, wherein the vaporized solid precursor originates from the a solid tantalum-containing precursor;

a first wall to support the inlet;

at least one two surface surfaces contained in the housing for application of the solid tantalum-containing precursor, wherein the at least one two surface surfaces are is located on a second wall adjoining and substantially perpendicular to the first wall and the at least one two surface surfaces are is spaced to allow passage of the carrier gas; and

a heating member contained in the housing.

9. (Currently Amended) The apparatus of claim 8, wherein the outlet is operably connected to ~~[[a]] an atomic layer reaction chamber of a deposition chamber.~~

10. (Original) The apparatus of claim 9, wherein the at least one surface is selected from the group consisting of a baffle, a rod, a mesh and a grating.

11. (Original) The apparatus of claim 8, wherein the heating member is contained within the at least one surface.

12. (Original) The apparatus of claim 9, wherein the at least one surface has a form selected from the group consisting of an s-shape, a linear shape and a cone shape.

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13. (Original) The apparatus of claim 12, wherein the at least one surface is formed of a material selected from the group consisting of stainless steel and ceramic.

14-15. (Cancelled)

16. (Currently Amended) An apparatus for vaporizing a solid precursor, comprising:

a housing defining an interior volume having an inlet for receiving a carrier gas and an outlet for delivering the carrier gas and a vaporized solid precursor to an atomic layer deposition chamber, wherein the vaporized solid precursor originates from the a solid tantalum-containing precursor;

at least two surfaces contained in the housing, wherein the at least two surfaces contain a ceramic material, have the solid precursor applied thereto, and are spaced to allow passage of the carrier gas therebetween; and

at least one heating member contained in at least one wall of the housing.

17. (Currently Amended) The apparatus of claim 16, wherein the at least two surfaces is are selected from the group consisting of a baffle, a rod, a mesh and a grating.

18-20. (Cancelled)